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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,871	04/16/2001	Mark Vange	CIRC025	5577

25235 7590 07/27/2004
HOGAN & HARTSON LLP
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DENVER, CO 80202

EXAMINER

EL HADY, NABIL M

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/835,871	Applicant(s) VANGE, MARK	
	Examiner Nabil M El-Hady	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/26/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 1-31 are presented for examination.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 7, 9-11, 15, 16, 19, 20, 22, 23, 25-27, 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Doshi et al. (6,529,499) (hereinafter Doshi).
4. As per claim 1, Doshi teaches A system for prioritizing communication in a shared bandwidth communication network comprising: an interface to the shared bandwidth communication network operable to transport data for a plurality of users (e.g. Figure 1, elements 220 and Col. 2, lines 46-55); a front-end server coupled to the interface to select the rate and order at which data is supplied through the interface to the shared bandwidth communication network (e.g. Figure 1, element 230 and Col. 3, lines 46-55).
5. As per claim 11, it is rejected for similar reasons as stated above.
6. As per claim 25, it is rejected for similar reasons as stated above.

7. As per claim 30, it is rejected for similar reasons as stated above.
8. As per claim 2, Doshi teaches the system wherein the front-end server supplies the data to the interface at a rate and order that determines a relative priority of the data (e.g. col. 1, lines 55-60).
9. As per claim 26, it is rejected for similar reasons as stated above.
10. As per claim 31, it is rejected for similar reasons as stated above.
11. As per claim 3, Doshi teaches the system wherein the interface is a router and the front-end server couples to the router, wherein the front-end server communicates control information to the router to manipulate the rate and order of data flow through the router (e.g. Figure 1, elements 230 and 240).
12. As per claim 27, it is rejected for similar reasons as stated above.
13. As per claim 4, Doshi teaches the system wherein the interface supports TCP channels (e.g. col. 3, lines 36-42).
14. As per claim 19, it is rejected for similar reasons as stated above.

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15. As per claim 5, Doshi teaches the system wherein the front-end server selectively applies data to the TCP channels at a rate and order that effectively prioritizes some channels over other channels (e.g. col. 4, lines 30-40).

16. As per claim 15, it is rejected for similar reasons as stated above.

17. As per claim 16, it is rejected for similar reasons as stated above.

18. As per claim 20, it is rejected for similar reasons as stated above.

19. As per claim 7, Doshi teaches the system wherein the shared bandwidth communication system comprises a gateway to a wireless network (e.g. Figure 1, blocks 210, the SS7 switches are to handle wireless as well as terrestrial traffic).

20. As per claim 22, it is rejected for similar reasons as stated above.

21. As per claim 23, it is rejected for similar reasons as stated above.

22. As per claim 9, Doshi teaches the system wherein the shared bandwidth communication system comprises a network having a shared access point, wherein the access point creates a bandwidth restriction that is shared by all users of the access Point (e.g. col. 3, lines 1-11).

23. As per claim 10, Doshi teaches the system wherein the shared bandwidth communication system comprises an Internet Service Provider (e.g. col. 3, lines 1-11).

24. As per claim 29, Doshi teaches the server wherein the second interface includes mechanisms for communicating prioritization information associated with data communicated with the data network (e.g. Figure 1 and Abstract).

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doshi in view of Yamashita et al. (6,233,224) (hereinafter Yamashita).

27. As per claim 6, Doshi does not specifically teach the system wherein the front end server manipulates TCP parameters including window size, window expansion rate, and window contraction rate to effectively prioritize some channels over other channels. Yamashita teaches the system wherein the front-end server manipulates TCP parameters including window size, window expansion rate, and window contraction rate to effectively prioritize some channels over other channels (e.g. cols. 3 and 4, lines 6376 and 1-10 respectively). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Doshi with Yamashita. The motivation would have been to control and prioritize the flow of information in order for time sensitive information to be delivered before non-time sensitive information.

28. As per claim 21, it is rejected for similar reasons as stated above.

29. Claims 8 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doshi in view of "Official Notice".

30. As per claim 8, Doshi does not specifically teach the system wherein the shared bandwidth communication system comprises a cable modem system. "Official Notice" is taken that both the concept and the advantages of cable modem is well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a cable modem in the system in order to provide for faster access to network resources.

31. As per claim 24, it is rejected for similar reasons as stated above.

32. Claims 12-14, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doshi in view of Brown et al. (6,185,520) (hereinafter Brown).

33. As per claim 12, Doshi does not specifically teach the method further comprising associating each socket with a unique priority level. Brown teaches the method further comprising associating each socket with a unique priority level (e.g. col. 11, lines 9-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Doshi with Brown. The motivation would have been to provide for separate TCP connections for time sensitive information.

34. As per claim 13, it is rejected for similar reasons as stated above.

35. As per claim 14, it is rejected for similar reasons as stated above.

36. As per claim 17, it is rejected for similar reasons as stated above.

37. As per claim 18, it is rejected for similar reasons as stated above.

38. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doshi in view of Kaczynski (6,205,119) (hereinafter Kaczynski).

39. As per claim 28, Doshi does not specifically teach the server wherein the means to selectively apply modifies the rate/order at which data is coupled from the data buffers to the interface so as to throttle bandwidth allocated to a first set of the data so as to explicitly gain more than a fair share of available bandwidth for a second set of the data. Kaczynski teaches the server wherein the means to selectively apply modifies the rate/order at which data is coupled from the data buffers to the interface so as to throttle bandwidth allocated to a first set of the data so as to explicitly gain more than a fair share of available bandwidth for a second set of the data (e.g. col. 8, lines 17-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Doshi with Kaczynski. The motivation would have been to gain control over data streams in order to allocate higher bandwidth for time sensitive information.

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40. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M El-Hady whose telephone number is (703) 308-7990.

The examiner can normally be reached on 9:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 25, 2004


Nabil El-Hady, Ph.D, M.B.A.
Primary Patent Examiner
Art Unit 2154